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Abstract

The purpose of this project was to provide a longitudinal analysis of a cohort of high school students five years after graduation. Data were collected on the social characteristics, values, and activities of the students while they were in high school. The present research provided a follow-up study to compare some of their present social characteristics, values, and activities with the high school data. Included in the five objectives of the research are: (1) comparison of high school students' educational values with the educational values of the same students five years after graduation, and (2) the analysis of possible background factors associated with the permanence of high school friendships. A mailed questionnaire was used to gather the follow-up data. A comparison of the respondents with the nonrespondents indicates they were not significantly different. Results indicate: (1) radical shifts have taken place in the educational values of the students, and (2) high school social participation was significantly related to educational achievement or occupational status. Findings support the notion of a youth subculture that has both internal variability and external connections to the adult society. (KJ)

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November 15, 1967

U.S. DEPARTMENT OF
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Eldon E. Snyder

Bowling Green State University

Bowling Green, Ohio

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A LONGITUDINAL ANALYSIS OF HIGH SCHOOL STUDENT BEHAVIOR AND SOCIAL CHARACTERISTICS FIVE YEARS LATER

Summary.

The purpose of this research project was to provide a longitudinal analysis of a cohort of high school students five years after graduation. Data were collected on the social characteristics, values, and activities of the students while they were in high school. The present research provided a follow-up study to compare some of their present social characteristics, values, and activities with the high school data.

The objectives of the research were:

(a) The comparison of the high school students' educational values with the educational values of the same individuals five years after graduation.

(b) The comparison of the high school students' social participation in voluntary school activities and organizations with their social participation in voluntary organizations (associations) at the present time.

(c) The study of possible relationships between the high school students' educational values, social participation in school activities, and later educational and occupational status.

(d) The analysis of possible background factors associated with the permanence of high school friendships.

(e) The comparison of the achievement orientation variable with social participation in high school activities, present participation in voluntary associations, educational values, and educational and occupational achievements.

A mailed questionnaire was used to gather the follow-up data. A comparison of the respondents with the non-respondents on several background variables indicates they were not significantly different.

The results of the research are:

(a) Radical shifts have taken place in the educational values of the students. In high school the majority of the students were oriented toward popularity, athletics and activities. Since high school the value orientations have shifted toward academic achievement.

(b) A moderate relationship existed between social participation in high school organizations and participation in voluntary associations five years after graduation. A "life cycle" study of

social participation probably will show more significant differences with additional follow-up data.

(c) Students who displayed high school values toward popularity, activities, and athletics tended to participate in school activities more than students who embraced academic values.

(d) High school educational values were not associated with educational achievement or occupational status.

(e) High school social participation was significantly related to educational achievement and occupational status.

(f) Apparently many of the abler students seek the social recognition of the student subcultural values of popularity, activities, and athletics. These students, however, tend to continue their education beyond high school and achieve a higher academic and occupational status than the non-participants. Social participation was positively related to educational achievements (and, in turn, occupational status) when I. Q. was controlled.

(g) The proportion of high school friendships that have continued five years after high school was not related to the "faith in people index," marital status, sex, SES, educational or occupational status. The "friendship solidarity index" and social participation in high school were positively associated with the proportion who continued to maintain their high school friendships.

(h) The present achievement orientation is not associated with participation in voluntary associations or educational values. Among the males it is moderately associated with high school social participation. The achievement orientation is positively related to educational achievement and occupational status (males).

The findings of this research have significance in providing a longitudinal dimension in the study of adolescents and the youth subculture. This longitudinal analysis provides a "second look" at the former students and the continuity and discontinuity can be observed in this transitional stage.

The findings further support the notion of a youth subculture that has both internal variability and external connections to the adult society.

The investigator suggests that the rapid shifts in educational values toward a more academic orientation provides support for continuing education programs that might capitalize on these changes.

The investigator, further, recommends that parents and school guidance and counseling personnel should recognize that student social participation in high school activities serves a very important function and is, indeed, associated with later educational and occupational achievements. This information has significance both for college entrance requirements as well as for prospective employers.

Statement of the Problem.

To understand the internal structure and functioning of school systems requires an understanding of adolescent behavior. However, the full significance of adolescent behavior may not be understood until it is viewed from a later stage in life. The present research project, by studying the passage of individuals as they move from adolescence to adulthood, may provide a better understanding of the relationship between adolescent and adult behavior. Indirectly, the findings of this research provide an evaluation of high school co-curricular activities as determined by the social characteristics, activities, and values of the same individuals as young adults.

Related Research and Literature.

A number of investigators have collected data on the characteristic ways of behaving and the values of adolescents within school systems. A pioneer work was provided by Waller in The Sociology of Teaching in which he described aspects of the school culture and the significance of student participation in school organizations.[1] He noted that the various school clubs are "apparently the early form of the sifting and sorting agencies of adult societies."[2]

Socioeconomic status (socioeconomic status will be abbreviated as SES throughout most of this report) has been an independent variable related to dependent behavioral characteristics in a number of studies of adolescent behavior. Studies by Hollingshead,[3] Stendler,[4] and Taba[5] are examples of research of these variables.

Gordon[6] studied the student social structure of a high school. His scheme for analyzing the social participation of students in voluntary school activities and organizations was utilized in the present research project.

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[1] Willard Waller, The Sociology of Teaching (New York: John Wiley, 1932).

[2] Ibid., p. 117.

[3] August B. Hollingshead, Elmtown's Youth (New York: John Wiley, 1949).

[4] Celia B. Stendler, Children of Brasstown (Urbana: University of Illinois Press, 1949).

[5] Hilda Taba, School Culture (Washington, D.C.: American Council of Education, 1955).

[6] C. Wayne Gordon, The Social System of the High School (Glencoe: The Free Press, 1957).

Coleman has postulated that adolescents interact together within the high school setting which results in the development of a subculture which "maintains few threads of connection with the outside society."[7] Central in Coleman's analysis is the study of adolescent values.[8] The extent to which adolescent values continue to be maintained in adulthood will be investigated in the present research.

In general, previous studies show a relationship between socioeconomic status and participation in adult voluntary associations.[9] However, little research is available on the possible relationships between social participation in high school organizations and activities and participation in voluntary associations as adults when socioeconomic status is controlled.

The previous follow-up studies of high school youth have concentrated on educational and occupational achievements.[10] Few, if any studies provide a follow-up analysis of the additional variables used in the present research project.

A number of studies have indicated a significant relationship between an achievement orientation and socioeconomic status, career patterns, the socialization process, and family patterns.[11] In the present study the

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[7]James S. Coleman, The Adolescent Society (Glencoe: The Free Press, 1960), p. 3.

[8]See also, James S. Coleman, Adolescents and the Schools (New York: Basic Books, 1965).

[9]Charles R. Wright and Herbert H. Hyman, "Voluntary Association Memberships of American Adults: Evidence From National Sample Surveys," American Sociological Review, 23 (June, 1958), pp. 284-294; also David Horton Smith, "Communication: Comparison of Self-reported Participation in Formal Voluntary Organizations with Ratings of Participation Given by Organization Leaders," Rural Sociology, 31 (September, 1966), pp. 362-365.

[10]Wilford M. Aikin, The Story of the Eight-Year Study (New York: Harper and Brothers, 1942); Ralph F. Berdie, After High School--What? (Minneapolis: The University of Minnesota Press, 1954); Dean Chamberlin, Enid Chamberlin, Neal E. Drought, and William E. Scott, Did They Succeed in College? (New York: Harper and Brothers, 1942); Margaret Willis, The Guinea Pigs (Columbus: Ohio State University Press, 1961).

[11]Glen H. Elder, Jr., "Achievement Orientations and Career Patterns of Rural Youth," Sociology of Education, 37 (Fall, 1963), pp. 30-58; Joseph A. Kahl, "Some Measurements of Achievement Orientation," American Journal of Sociology, 70 (May, 1965), pp. 669-681; Bernard C. Rosen, "Family Structure and Achievement Motivation," American Sociological Review, 26 (August, 1961), pp. 574-585; Bernard C. Rosen, "Socialization and Achievement Motivation in Brazil," American Sociological Review, 27 (October, 1962), pp. 612-624; Joseph Veroff, Sheila Feld, and Gerald Gurin, "Achievement Motivation and Religious Background," American Sociological Review, 27 (April, 1962), pp. 205-217.

achievement orientation variable will be compared with the follow-up data on educational achievement, educational values, and present participation in voluntary associations.

Moreno[12] and others have used sociometric techniques to study the student informal structure within schools as determined by friendship relationships. Blau[13] analyzed patterns of interpersonal relations within a welfare agency. However, little relevant data are available that deal with the permanence of high school friendship relationships over a period of time

The initial data were gathered on the students by the investigator as part of his doctoral research.[14]

Objectives.

It is hypothesized that significant relationships exist between the variables available on the individuals when they were high school students and data gathered on them five years later. This research project has as its primary objectives the following comparisons and possible relationships:

(a) The comparison of the high school students' educational values with the educational values of the same individuals five years after graduation.

(b) The comparison of the high school students' social participation in voluntary school activities and organizations with their social participation in voluntary organizations (associations) at the present time.

(c) The study of possible relationships between the high school students' educational values, social participation in school activities, and later educational and occupational status.

(d) The analysis of possible background factors associated with the permanence of high school friendships.

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[12] J.L. Moreno, Who Shall Survive? (New York: Beacon House, 1953); Norman E. Gronland, Sociometry in the Classroom (New York: Harper and Brothers, 1959).

[13] Peter M. Blau, "Patterns of Choice in Interpersonal Relations," American Sociological Review, 27 (February, 1962), pp. 41-55.

[14] Eldon E. Snyder, The School As A Social System: A Study of Selected Aspects of a Student Social Structure, unpublished doctoral dissertation, The University of Kansas, 1962. See also Eldon E. Snyder, "Socioeconomic Variations, Values, and Social Participation Among High School Students," Journal of Marriage and Family, 28 (May, 1966), pp. 174-176.

(e) The comparions of the achievement orientation variable with social participation in high school activities, present participation in voluntary associations, educational values, and educational and occupational achievements.

II. METHOD

The data were collected on a graduating class of students in the only high school in a Kansas community of 38,000 population. The community is diversified, with education, agriculture, and industry being represented. A public junior college is located in the community which results in a fairly high percentage of students continuing formal education beyond high school. The student population in the high school is representative of many midwestern high schools. Few students are members of minority groups. The high school, at the time the respondents were in school, had an enrollment of approximately 1,000. It is a three year high school. The sample included all usable questionnaires collected from the students who were present when the questionnaire was administered. Information was gathered regarding student educational values, social participation, socioeconomic status, and sex. Social participation was determined by combining the degree of involvement and the prestige of the activity or organization within the school culture. A modification of Chapin's Social Participation Scale was used in this analysis.[15]

The evaluation of socioeconomic status while in high school was based on father's occupation. Socioeconomic status at the present time was determined by occupation. This single item index appears to be valid. Centers has stated that, "Occupation seems generally agreed upon as the most satisfactory single index, probably because it is more objective..."[16] Barber has stated, "In contemporary industrial society, the single item most commonly used for social class indices is occupational position."[17] The occupational index used in the present study is Center's Occupational Index.[18]

Achievement orientation was determined by utilizing Rosen's studies of the achievement syndrome.[19]

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[15] F. Stuart Chapin, Experimental Designs in Sociological Research (New York: Harper and Brothers, 1955), pp. 276-278.

[16] Richard Centers, The Psychology of Social Classes (Princeton: Princeton University Press, 1949), p. 15.

[17] Bernard Barber, Social Stratification (New York: Harcourt, Brace and Co., 1957), p. 171.

[18] Centers, op. cit., p. 51.

[19] Bernard C. Rosen, "The Achievement Syndrome: A Psychocultural Dimension of Social Stratification," American Sociological Review, 21 (April, 1956), pp. 203-211; Bernard C. Rosen, "The Achievement Syndrome and Economic Growth in Brazil," Social Forces, 42 (March, 1964), pp. 341-354.

Data for the follow-up were gathered through the use of a mailed questionnaire. Three mailings were sent to the respondents. High School data were available on 343 (81 per cent) members of the graduating class. The follow-up study resulted in responses from 186 of the 343 former students (see TABLE 1).

TABLE 1

Number and Per Cent of Respondents and Non-Respondents Included in the Present Study

	Number	Per Cent
Respondents	186	54
Non-Respondents	157	46
Totals	343	100

Among the 157 non-respondents, adequate addresses were not available on 73. Thus responses were obtained on all but 84 former students where adequate addresses could be obtained. This is a 71 per cent response from the 259 former students who could be located. The important question to be raised at this point is, "Are there significant differences between the respondents and the non-respondents?" Since high school data were available on both groups this question can be answered with a high degree of definitiveness.

TABLE 2

Analysis of Some Primary Social Characteristics of Respondents and Non-Respondents (In Percentages)*

	Respondents N=186	Non-Respondents N=157
1. Sex		
Males (N=162)	52	48
Females (N=181)	56	44
**X^2=.52, 1 d.f., p=n.s.		
2. Parental SES		
Upper (N=94)	61	39
Middle (N=165)	51	49
Lower (N=65)	49	51
X^2=2.84, 2 d.f., p=n.s.		
3. Social Participation in High School		
Above the median	60	40
Below the median	52	48
X^2=1.67, 1 d.f., p=n.s.		
4. Percentile Rank in Graduating Class		
50 Percentile and above (N=159)	62	38
Below 50 Percentile (n=152)	57	43
X^2=.81, 1 d.f., p=n.s.		

*The totals among the variables in this table and others may differ because specific data was not available in all cases or respondents did not answer all items on the questionnaire

**The minimum level of confidence for statistical significance will be the .05 level.

Examination of TABLE 2 indicates that when comparing the respondents with the non-respondents to the follow-up study no significant differences are apparent with the variables of sex, parental SES, social participation in high school organizations and activities, or percentile rank in their graduating class. In the remainder of the study, which analyzes data obtained from the respondents, we can be relatively certain that the respondents are representative of the total graduating class.

III. RESULTS

(a) The comparison of the high school students' educational values with the educational values of the same individuals five years after graduation.

Within high schools, student prestige and social status reflect the values of the student subculture. Coleman[20] sought to determine educational values of students by asking the boys, "How would you most like to be remembered in school: as an athletic star, a brilliant student, or most popular?" The same question was asked of the girls except the phrase, "a leader in extracurricular activities," was substituted for, "an athletic star." The same technique was used to determine student values when the present research group was in high school. Their present educational values were determined by asking, "If you had a son or daughter who could be outstanding in high school in one of the three things listed below, which one would you want it to be: brilliant student, athletic star (son), leader in activities (daughter), or most popular?" TABLE 3 provides the male and female responses when in high school and at the present time.

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[20] James S. Coleman. The Adolescent Society, op. cit., pp. 28-30.

TABLE 3

Percentage of Responses to the Statements Below, By Sex

Males

Responses When in High School		Responses Now	
	Per Cent		Per Cent
Would like to be remembered as:		Would like their son to be remembered as:	
Brilliant Student	28	Brilliant Student	67
Most Popular	51	Most Popular	6
Star Athlete	21	Star Athlete	21
(N=80)	X^2=39.95, 2 d.f., p<.001	(N=81)	
Would like to be remembered as:		Would like their daughter to be remembered as:	
Brilliant Student	28	Brilliant Student	54
Most Popular	51	Most Popular	16
Star Athlete	21	Leader in Activities	30
(N=80)	X^2=22.96, 2 d.f., p<.001	(N=77)	

Females

Would like to be remembered as:		Would like their son to be remembered as:	
Brilliant Student	21	Brilliant Student	67
Most Popular	36	Most Popular	13
Leader in Activities	43	Leader in Activities	20
(N=98)	X^2=40.16, 2 d.f., p<.001	(N=91)	
Would like to be remembered as:		Would like their daughter to be remembered as:	
Brilliant Student	21	Brilliant Student	47
Most Popular	36	Most Popular	17
Leader in Activities	43	Leader in Activities	37
(N=98)	X^2=16.44, 2 d.f., p<.001	(N=101)	

Highly significant changes have taken place in the educational attitudes of these former students since their high school days. They now emphasize the desirability of academic achievement, especially for their sons. Popularity in high school is not seen as an important objective for their son or daughter.

(b) The comparison of the high school students' social participation in voluntary school activities and organizations with their social participation in voluntary organizations (associations) at the present time.

The comparisons in this section of the research report deal with the linkage between high school social participation and participation in voluntary associations within the community five years later. The students were divided into below and above the social participation median while in high school. This objective classification seems valid when compared with the subjective classification provided by the respondents five years later when they were asked the question, "Do you think you were a member of the 'leading crowd' in high school?" (see TABLE 4).

TABLE 4

Percentage of Responses to the Question, "Do You Think You Were a Member of the 'Leading Crowd' in High School?"

High School Social Participation	Yes	No
Below the median (N=90)	10	90
Above the median (N=92)	53	47

$X^2=34.99$
1 d.f.
$p<.001$

The analysis of membership in work-related organizations and social participation in high school is provided in TABLE 5.

TABLE 5

High School Social Participation and the Percentage of Respondents Who Are Members of a Work-Related Organization

High School Social Participation	Labor or Trade Union	Business or Professional Association	Do Not Belong or Did Not Answer
Below the median (N=93)	13	14	73
Above the median (N=93)	5	36	59

The data suggest that the students who were above the median in social participation in high school continue the characteristic in work-related organizations. They also are more likely to be in business and professional activities than those who were below the median in high school. TABLE 6 indicates the percentage of those above and below their high school participation median and belonging to voluntary associations at the present time.

TABLE 6

High School Social Participation and the Percentage of Respondents Who Belong to Voluntary Associations

High School Social Participation	Number of Voluntary Associations					
	None	1	2	3	4	5
Below the median (N=93)	50	30	8	5	5	2
Above the median (N=93)	41	32	14	5	4	3

While the differences between the high school social participation groups is not large it is in the anticipated direction with those above the median in high school continuing to be more active in adult voluntary associations. Participation within voluntary associations involves not only membership (belonging) but also the degree of involvement (see TABLE 7). Those who were above the high school median are a little more likely to attend voluntary associations regularly than those below the median.

TABLE 7

High School Social Participation and the Percentage of Respondents Who Regularly Attend Voluntary Associations*

High School Social Participation	Number of Associations Regularly Attended					
	None	1	2	3	4	5
Below the median (N=93)	61	21	4	5	0	1
Above the median (N=93)	54	30	11	3	2	1

*Secondary analysis of the data in TABLES 6 and 7 indicated that the boys were less active than girls in school organizations and activities but as adults they belong to, and regularly attend, voluntary associations about as frequently as the females. In fact, the differences in the above and below social participation median groups in TABLE 7 are primarily differences among the males. There are practically no differences between the high school above and below median groups among the women in their adult associational attendance.

The analysis given in TABLE 8 is a comparison of the percentage of office-holders in voluntary associations and high school social participation. The two groups do not show a significant difference in this respect.

TABLE 8

High School Social Participation and the Percentage of Respondents Who Hold Offices in Voluntary Associations

High School Social Participation	Number of Offices Held			
	None	1	2	3
Below Median (N=93)	86	8	6	0
Above Median (N=93)	88	9	2	1

TABLE 9 indicates the relationship between church attendance and high school social participation. Because it was suspected that there might be hidden sexual differences in the data the male and female differences were analyzed separately.

TABLE 9

High School Social Participation and Church Attendance By Sex (In Percentages)

High School Social Participation	Church Attendance: Attend About Once a Week	Attend At Least Once a Month	Attend Two or Three Times a Year	Seldom or Never	Prefer Not to Answer
Males and Females					
Below Median (N=93)	30	22	16	30	4
Above Median (N=93)	30	26	22	16	4
Males					
Below Median (N=57)	23	21	19	35	2
Above Median (N=27)	30	19	26	22	4
Females					
Below Median (N=36)	39	22	11	19	9
Above Median (N=66)	33	29	20	14	5

The data in TABLE 9 suggest that regular church attendance is slightly associated with high social participation while in school. The sexual differences in church attendance are apparent in both social participation groupings.[21]

[21] The reader should be cautioned that the relationships noted in this report are seldom simple one to one relationships. This will become more apparent in the later stages of the report. Attempts were made to control possible contaminating variables but with the size of the present sample this soon results in cell frequencies that are inadequately small. In general, only bivariate analyses were feasible, however, in some cases additional analyses were made and footnotes are given that are suggestive of what the findings would be with more elaborate controls.

(c) The study of possible relationships between the high school students' educational values, social participation in school activities, and later educational and occupational status.

The primary analyses in this section will deal with:

(1) high school educational values and educational achievement,
(2) high school educational values and present occupational status,
(3) social participation in high school and educational achievement, and
(4) social participation in high school and present occupational status.

While the above analyses deal directly with the propositions posed, secondary analyses will consider the possible relationships between: (1) high school social participation and values, and (2) educational achievement and occupational status.

TABLE 10 presents data regarding the educational values expressed by the students while they were in high school and their eventual educational achievement.

TABLE 10

Percentage of High School Students Who Expressed Educational Values and Their Educational Achievement*

	Educational Achievement		
Educational Values in High School:	None Beyond High School	Some College	At least a Bachelor's Degree
Student would like to be remembered as:			
Brilliant Student (N=43)	16	49	35
Most Popular (N=76)	24	46	30
Star Athlete (boys)-Leader in Activities (girls) (N=58)	21	29	50

X^2=7.26, 4 d.f., p=n.s.

*There were no significant differences between males and females on educational achievement.

It is interesting to note that, while a larger percentage of students who embraced the academic value went to college than the other two value orientations, the students who were oriented to sports and activities were more likely to complete college.

Data concerning high school educational values and present occupational status were computed only on the males since occupation probably has a different meaning and significance for most males than for females in our society (TABLE 11).

TABLE 11

Percentage of High School Boys Who Expressed Educational Values and Their Present Occupational Status

Educational Values in High School	Occupational Status: White Collar Occupation	Occupational Status: Blue Collar Occupation
Student would like to be remembered as:		
Brilliant Student (N=20)	50	50
Most Popular (N=38)	55	45
Star Athlete (N=14)	50	50

X^2=.19, 2 d.f., p =n.s.

TABLES 10 and 11 indicate that the educational values students hold while in high school do not seem to be related to their eventual educational and occupational attainments.

The relationships between high school social participation and educational achievement, and social participation and occupational status are presented in TABLES 12 and 13.

TABLE 12

High School Social Participation and Education Achievements (In Percentages)*

High School Social Participation	Educational Achievement: None Beyond High School	Some College	At least a Bachelor's Degree
Below Median (N=86)	35	46	19
Above Median (N=89)	10	36	54

X^2=28.15, 2 d.f., $p<.001$

*Additional analysis indicated that the relationship noted in TABLE 12 prevailed among both men and women. When Intelligence Quotient was controlled, high school social participation was positively associated with

educational achievement. Parental SES was also related to educational achievement. When parental SES was controlled there continued to be a definite positive relationship between high school social participation and educational achievements. It is reasonable to expect that there is an interactive effect of several of these variables.

TABLE 13

Male High School Social Participation and Occupational Status (In Percentages)

	Occupational Status	
High School Social Participation	White Collar Occupation	Blue Collar Occupation
Below Median (N=53)	38	62
Above Median (N=23)	78	22

X^2=8.97, 1 d.f., p<.01

The data in TABLE 12 indicate that participation in high school activities and organizations is associated with educational achievements. Students who were above the median tended to achieve a higher educational level than those below the median. Among the males the same relationship prevails with social participation in high school and occupational status.

Thus far, consideration (to the relationships in item c) has been given to the following:

(1) High school educational values and educational achievement.

(2) High school educational values and present occupational status.

(3) Social participation in high school and educational achievement.

(4) Social participation in high school and occupational status.

TABLES 14 and 15 present secondary analyses on the possible associations between the variables of:

(1) High school social participation and educational values.

(2) Educational achievement and occupational status.

TABLE 14

Percentage of High School Students
Who Expressed Educational Values and
Their Social Participation in High School*

Educational Values in High School	Social Participation in High School	
	Below Median	Above Median
Student would like to be remembered as:		
Brilliant Student (N=43)	65	35
Most Popular (N=76)	53	47
Star Athlete (Boys) (N=59) Leaders in Activities (Girls)	34	66

X^2=10.23, 2 d.f., p<.01

Students who valued scholarship tended to participate less in school activities and organizations than students who valued popularity, athletics and activities. This is what we would expect if the expressed values were being translated into overt student behavior (though these findings are modified by the sexual differences in the footnote below).

*When the sex variable in TABLE 14 was controlled, the findings suggest that the differences were primarily among the females.

TABLE 15

Male Educational Achievement
and Occupational Status (In Percentages)

Educational Achievement	Occupational Status	
	White Collar	Blue Collar
None Beyond High School (N=20)	30	70
Some College (N=28)	21	79
At least a Bachelor's Degree (N=28)	93	7

The chi-square was not computed on the data in TABLE 15 because of the low cell frequencies. However, the cautious observation can be made that the men with only a high school degree tended to enter blue collar occupations, whereas the men with a bachelor's degree usually entered white

collar occupations. An additional assumption, which cannot be verified by these data, is that those persons with some college experience probably gravitated, within the blue collar occupations, toward skilled and supervisory positions.

(d) The analysis of possible background factors associated with the permanence of high school friendships.

In the initial study the high school students were asked to name and rank their three best friends. Many studies have analyzed sociometric techniques and their uses within school systems.[22] Few, if any, follow-up studies have been made of factors that might be associated with a continuation of these friendships. Why is it that some high school graduates continue to maintain regular contact five years later with their high school friends and others do not? The data presented below examine a number of background characteristics of the respondents in an attempt to deal with variables that might be associated with the proportions of students who have maintained regular contact with their high school best friends.

TABLE 16

Percentage of Upper, Middle, and Lower Class Students Who Maintained Regular Contact with Their Best Friends Five Years After High School

Parental Socioeconomic Status	Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3		
		Yes	No		Yes	No		Yes	No
Upper	(N=57)	58	42	(N=58)	41	58	(N=52)	35	65
Middle	(N=83)	47	53	(N=82)	44	56	(N=73)	41	59
Lower	(N=32)	41	59	(N=30)	30	70	(N=30)	37	63
	X^2=2.82 2 d.f. p=n.s.			X^2=1.78 2 d.f. p=n.s.			X^2=.57 2 d.f. p=n.s.		

Apparently the parental SES is not a major factor in the proportion of respondents who continued high school friendships (though SES may be important in who is a friend to whom). With the two best friends a slight relationship seems to favor the friendships continuing among the upper and middle status categories.

[22] Norman E. Gronlund, Sociometry in the Classroom (New York: Harper, 1959).

TABLE 17

Percentage of Males and Females Who Maintained Regular Contact With Their Best Friends Five Years After High School

		Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3	
Sex		Yes	No		Yes	No		Yes	No
Males	(N=84)	46	54	(N=83)	33	67	(N=72)	32	68
Females	(N=101)	50	50	(N=97)	44	56	(N=93)	40	60
		X^2=2.14 1 d.f. p=n.s.			X^2=2.14 1 d.f. p=n.s.			X^2=.76 1 d.f. p=n.s.	

When males and females are compared with respect to the continuance of high school friendships the differences are not statistically significant. However, the slight differences that do exist favor the continuation of friendships among the females and this is consistent among all three friend categories.

TABLE 18

Percentage of Respondents Who Are Single and Married Who Maintained Regular Contact With Their Best Friends Five Years After High School

		Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3	
Marital Status		Yes	No		Yes	No		Yes	No
Married	(N=132)	51	49	(N=128)	37	63	(N=127)	35	65
Single	(N=50)	46	54	(N=49)	45	55	(N=45)	33	67
		X^2=.16 1 d.f. p=n.s.			X^2=.53 1 d.f. p=n.s.			X^2=.00 1 d.f. p=n.s.	

The data presented in TABLE 18 indicate that marital status among the respondents does not seem to be associated with the proportion who have continued high school friendships.

Intuitively, one might expect less permanent friendship relationships among those students who went on to college, and especially those who left the community to complete a Bachelor's degree (there is only one small

four year college within easy commuting distance of the community and a very small percentage of the students attended this school.) These data are presented in TABLE 19.

TABLE 19

Educational Achievement and the Continued Regular Contact With Best Friends Five Years After High School (In Percentages)

Educational Achievement		Maintained Regular Contact With: Friend No. 1 Yes	No	Friend No. 2 Yes	No	Friend No. 3 Yes	No
None Beyond High School	(N=41)	51	49	(N=39) 38	62	(N=33) 45	55
Some College	(N=76)	49	51	(N=74) 32	68	(N=68) 40	60
At Least a Bachelor's Degree	(N=67)	46	54	(N=66) 45	55	(N=63) 28	72
		X^2=.25 2 d.f. p=n.s.		X^2=2.49 2 d.f. p=n.s.		X^2=3.14 2 d.f. p=n.s.	

No significant proportional differences exist among the three educational levels and continued contact with high school friends. Only with the third friendship choice do we find the percentage of college graduates differing very much from those with only a high school degree.

Appraisal of TABLE 20 indicates that the academic performance of the respondents when they were in high school has no significant relationship with the percentage who maintain regular contact with their high school friends.

TABLE 20

Percentage of Students Above and Below the 50th Percentile Rank Who Continued Regular Contact With Best Friends Five Years After High School

Percentile Rank in Graduating Class	Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3		
		Yes	No		Yes	No		Yes	No
50th Percentile and Above	(N=97)	51	49	(N=96)	43	57	(N=92)	30	70
Below the 50th Percentile	(N=86)	47	53	(N=83)	35	65	(N=72)	44	56
		X^2=.15 1 d.f. p=n.s.			X^2=.82 1 d.f. p=n.s.			X^2=2.83 1 d.f. p=n.s.	

TABLE 21 provides an analysis of the percentage of students above and below the high school social participation median who have continued to maintain regular contact with their three best high school friends.

TABLE 21

Percentage of Students Above and Below the Social Participation Median Who Have Maintained Regular Contact With Best Friends Five Years After High School

High School Social Participation	Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3		
		Yes	No		Yes	No		Yes	No
Below Median	(N=93)	41	59	(N=91)	29	71	(N=90)	32	68
Above Median	(N=92)	57	43	(N=91)	48	52	(N=86)	36	63
		X^2=3.93 1 d.f. p<.05			X^2=6.70 1 d.f. p<.01			X^2=.14 1 d.f. p=n.s.	

Significant differences are apparent between those above and those below the median. Those who were above the social participation median tended to maintain friendships with their two best friends to a greater degree than the respondents who were below the median in their high school days. No significant difference was apparent when their third choices were considered.

TABLE 22 presents the percentages of males who entered white and blue collar occupations and the continuance of high school friendhsips.

TABLE 22

Percentage of Males in White and Blue Collar Occupations
Who Have Maintained Regular Contact
With Best Friends Five Years After High School

Occupational Status		Maintained Regular Contact With: Friend No. 1 Yes	No	Friend No. 2 Yes	No	Friend No. 3 Yes	No
White Collar	(N=38)	47	20	(N=38) 42	58	(N=35) 20	80
Blue Collar	(N=38)	47	20	(N=37) 24	76	(N=31) 45	55

Because of the low cell frequencies chi-squares were not calculated for the data in TABLE 22. However, the percentages indicate no differences on the continuation of regular contact with the first friend choice. Regular contact with the second and third friendship choices show some variations but a clear relationship between occupation and the percentage who have continued their high school friendships is not apparent.

Presumably the permanence of high school friendships would be associated with having friends of long standing, friends who are also friends of each other, and friends who come from families who also know each other. An index of friendship solidarity[22] (which provided a rating scale on these three friendship characteristics) was compared to the continuation of high school friendships. (See TABLE 23).

[22] Index of friendship solidarity: Are most of your friends people you grew up with? Are most of your close friends also friends of each other? Do most of your friends come from families who know each other?

TABLE 23

Percentage of Respondents Who Rate High and Low on Friendship Solidarity Who Have Maintained Regular Contact With Their Best Friends Five Years After High School

Friendship Solidarity	Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3		
		Yes	No		Yes	No		Yes	No
High	(N=45)	44	56	(N=43)	60	40	(N=38)	50	50
Low	(N=136)	51	49	(N=137)	31	69	(N=137)	30	70
	X^2=.41 1 d.f. p=n.s.			X^2=11.13 1 d.f. p=<.001			X^2=4.46 1 d.f. p=<.05		

Friendship solidarity does not seem to be associated with the permanence of the first friendship choices, but it is significantly related to the second and third choices.

Turning to a social psychological dimension that could conceivably be a factor in the permanence of friendships, a scale was used to measure "faith in people." This scale has been used by Rosenberg to provide a measure of respect and trust toward other people.[23] TABLE 24 presents the percentage of respondents who ranked high and low on the "faith in people" scale.

TABLE 24

Percentage of Respondents Who Rate High and Low on the "Faith in People" Scale Who Have Maintained Regular Contact With Their Best Friends Five Years After High School

Faith in People Scale*	Maintained Regular Contact With: Friend No. 1			Friend No. 2			Friend No. 3		
		Yes	No		Yes	No		Yes	No
High	(N=118)	51	49	(N=114)	45	55	(N=104)	37	63
Low	(N=67)	45	55	(N=65)	29	71	(N=60)	37	63
	X^2=.41 1 d.f. p=n.s.			X^2=3.55 1 d.f. p=n.s.			X^2=.02 1 d.f. p=n.s.		

*coefficient of reproducability = .93

[23] Morris Rosenberg, Society and the Adolescent Self-Image (Princeton: Princeton University Press, 1965) pp. 180-183.

The faith in people characteristic does not seem to be associated with proportions of respondents who continued contact with high school friends.

(e) The comparison of the achievement orientation variable with social participation in high school activities, present participation in voluntary associations, educational values, and educational and occupational achievements.

Originally the investigator planned to utilize several items used by Rosen to study the achievement orientation.[24] However, several of the items failed to provide the desired level of discrimination among the respondents; one item that seemed to meet the desired function of measuring an achievement orientation was the following: "All I want out of life in the way of a career is a secure, not too difficult job, with enough pay to afford a nice car and finally a home of my own." The orientation toward achievement used in the following analyses utilizes the responses to the above item.

TABLE 25 gives the percentage of respondents who answered the achievement item and their social participation classification while they were in high school. The sexual differences are controlled since a higher percentage of girls than boys were participants in the school co-curricular activities.

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[24] See footnote number 19.

TABLE 25

Percentage of Responses on the Achievement Orientation Item and Social Participation of the Respondents When They Were in High School, by Sex

Percentage of Responses to Achievement Orientation	Social Participation in High School	
	Above Median	Below Median
	Males	
Achievement Orientation (N=52)	41	59
Non-Achievement Orientation (N=32)	16	84
X^2=4.83, 1 d.f., p<.05		
	Females	
Achievement Orientation (N=68)	69	31
Non-Achievement Orientation (N=32)	56	44
X^2=1.06, 1 d.f., p=n.s.		
	Males and Females	
Achievement Orientation (N=120)	57	43
Non-Achievement Orientation (N=64)	36	64
X^2=6.36, 1 d.f., p<.02		

There is a relationship between social participation in high school and the achievement orientation on the follow up study. This relationship is statistically significant among the males and, while not statistically significant among the females, it is also in the direction of the achievement orientation being associated with student social participation above the high school median.[25]

[25]Separate analyses were made of the possible relationships between sex and parental SES and the achievement orientation. In both analyses the relationships were not statistically significant. The chi-square between sex and an achievement orientation was .59, and the chi-square between parental SES and the achievement item was .58. When I.Q. was controlled the positive association between social participation and the achievement orientation remained. For example, the following percentages of students were above the social participation median:

	I.Q. Below 100	I.Q. 100-110	I.Q. 111 and Above
Achievement Orientation	40	42	66
Non-Achievement Orientation	26	22	60

Data regarding the achievement orientation and the number of voluntary associations the individual belongs to at the present time are presented in TABLE 26.

TABLE 26

Percentage of Responses on the Achievement Orientation Item and Belonging to Voluntary Associations

Percentage of Responses to Achievement Orientation	Number of Associations None	1-2	3 or more
Achievement Orientation (N=119)	44	40	16
Non-Achievement Orientation (N=64)	48	44	8

X^2=2.43, 1 d.f., p=n.s.

No significant differences were found between the respondents on the achievement orientation item and the number of voluntary associations they belonged to.

When considering the achievement orientation and the number of voluntary organizations the respondents regularly attend, the relationship was not significant (see TABLE 27)

TABLE 27

Percentage of Responses on the Achievement Orientation Item and Regular Attendance of Voluntary Associations

Percentage of Responses to Achievement Orientation	Number of Associations Attend Regularly None	1-2	3 or more
Achievement Orientation (N=119)	60	32	8
Non-Achievement Orientation (N=64)	53	45	2

X^2=5.58, 2 d.f., p=n.s.

Are educational values correlated with an achievement orientation? The responses in TABLE 28 deal with this question.

TABLE 28

Percentage of Responses on the Achievement Orientation Item and Educational Values

Percentage of Responses to Achievement Orientation	Would Like Their Son to Be Remembered As:		
	Brilliant Student	Star Athlete	Most Popular
Achievement Orientation (N=110)	72	19	9
Non-Achievement Orientation (N=59)	58	31	11
X^2=3.61, 2 d.f., p=n.s.			

Percentage of Responses to Achievement Orientation	Would Like Their Daughter to Be Remembered As:		
	Brilliant Student	Star Athlete	Most Popular
Achievement Orientation (N=113)	51	36	13
Non-Achievement Orientation (N=61)	51	31	18
X^2=1.18, 2 d.f., p=n.s.			

When the respondents revealed their values toward high school education, by reflecting on what they desire for their son or daughter, there is not a statistically significant relationship with the achievement orientation item. However, more achievement oriented than non-achievement oriented respondents would prefer their son to be a high school scholar.

TABLE 29 gives the percentage of achievement and non-achievement oriented respondents and their educational achievements.[26]

[26]A significant positive relationship was found between the achievement orientation and percentile rank in their high school graduating class. This relationship was significant at the .01 level of confidence. A positive association was also present between I.Q. and an achievement orientation. When I.Q. was held constant a positive relationship existed between educational achievement and an achievement orientation. When parental SES was controlled, attending college, and especially the attainment of a bachelor's degree, was positively related to the achievement orientation item among both the white and blue collar categories.

An interactive effect is likely between these variables and educational achievement.

TABLE 29

Percentage of Responses on the Achievement Orientation Item and Educational Achievement

Percentage of Responses	Educational Achievement		
	None Beyond High School	Some College	At Least A Bachelor's Degree
Achievement Orientation (N=120)	17	37	46
Non-Achievement Orientation (N=63)	32	47	21

X^2=12.02, 2 d.f., p<.01

A significant positive relationship is present between responses to the achievement orientation item and educational achievement.

To determine the possible relationship between an achievement orientation and occupational achievement the data were analyzed and presented in TABLE 30.

TABLE 30

Percentage of Male Responses on the Achievement Orientation Item and Occupational Status

Percentage of Male Responses to Achievement Orientation	Occupational Achievement	
	White Collar Occupation	Blue Collar Occupation
Achievement Orientation (N=48)	63	37
Non-Achievement Orientation (N=28)	29	71

X^2=6.84, 1 d.f., p<.01

It is evident that a positive relationship exists between the respondents who have entered white collar occupations and the achievement orientation; the inverse is true for the blue collar occupational grouping.

The investigator wondered if the female respondents might be classified concerning their occupational outlook and the achievement orientation. The women who viewed their occupation as "housewife only" were compared with the women who indicated a "career" or "career and housewife." TABLE 31 presents these data.

TABLE 31

Percentage of Female Responses on the Achievement Orientation Item and Occupational Outlook

Percentage of Female Responses to Achievement Orientation	Occupational Outlook: Lifetime Career and Housewife	Occupational Outlook: Housewife Only
Achievement Orientation (N=68)	53	47
Non-Achievement Orientation (N=31)	29	71

$X^2=3.99$, 1 d.f., $p<.05$

The achievement oriented women were about evenly divided between the two occupational outlook categories. The non-achievement oriented women tended to mark "housewife only" in their responses.

The association between an achievement orientation and occupational achievement (and occupational outlook) should be cautiously accepted; other variables are also associated with each of them.

IV. DISCUSSION

(a) The comparison of the high school students' educational values with the educational values of the same individuals five years after graduation.

The longitudinal comparison of educational values indicated that very significant changes have taken place. When the respondents were in high school most studnets would desire to be remembered as popular, star athletes, and leaders in school activities. These same people, as young adults, reflecting on what they would wish their son or daughter to gain from high school, stressed academic achievement. The differential expectations in our culture for boys and girls are revealed, however, in their responses. Both men and women feel that it is more important for their sons to have a high academic record than their daughters.

One question might be raised concerning the measurement of changes in educational values. Their high school values represented the way they would like to be remembered, their present values are based upon what they want for their son or daughter. It might be argued that since this comparison is of different people it is injecting a confusing element. This may be true, but presumably these young adults are revealing educational values when they reflect on what they would desire for their children. Probably this is a more valid measure of educational values than to ask them how they would like to be remembered in high school five years after graduation; this is now academic. These findings concerning high school values support the findings by Coleman. However, this longitudinal analysis provides additional information concerning the apparent radical shift in values in early adulthood.

(b) The comparison of the high school students' social participation in voluntary school activities and organizations with their social participation in voluntary organizations (associations) at the present time.

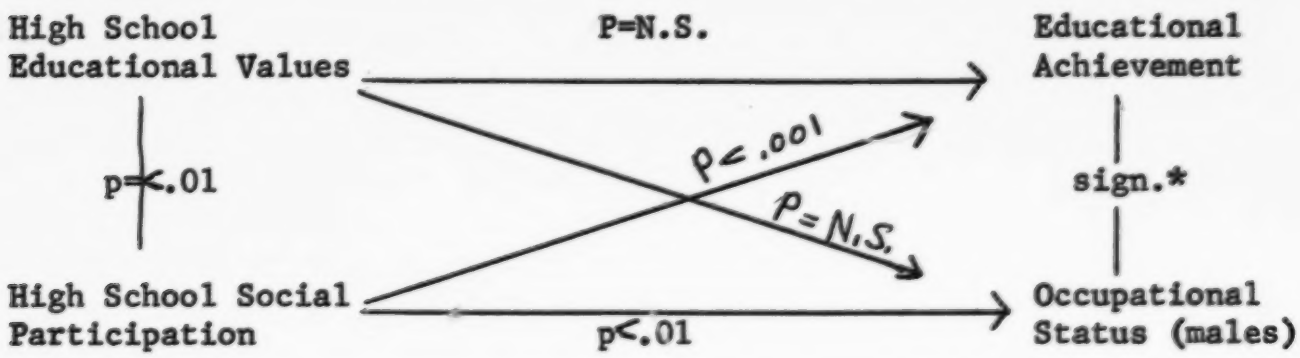
The investigator expected that those students who were most active in high school activities and organizations would also be active in voluntary associations in adulthood. This expectation was generally verified. While the differences were not large, in most cases not statistically significant, they were consistent. One feasible explanation for those who were above the median in high school not participatimg more in community voluntary associations is that a "life cycle" of participation may be operating. Many of the high school participants went to college (see TABLE 12) and they are just now involving themselves in community organizations; whereas, many of the students who were below the social participation median entered the community at an earlier point in time. One would expect that the slight differentials noted at the present time (when the respondents are young adults) will increase in the future. This will be a question that additional longitudinal research with these people will be able to answer.

(c) The study of possible relationships between the high school students' educational values, social participation in school activities, and later educational and occupational status.

This part of the research deals with the relationships between high school educational values and social participation and later educational and occupational status. Secondary analyses deal with the relationships between high school values and social participation and educational achievement and occupational status. The following diagram illustrates the findings among these variables.

Figure 1

The Relationships Between High School Educational Values, Social Participation, Educational Achievement, and Occupational Status



*The statistical probability was not calculated because of low cell frequencies but an examination of TABLE 15 indicates significance. The arrows indicate the passage from high school to the present time.

The lack of a significant association between high school educational values and later educational achievement seems, at first, incongruous. One might raise a question regarding the validity of the Coleman method of value analysis; it may be that his approach is inadequate. However, if his approach is valid, the apparent inconsistency noted above may not be so startling when we are reminded of the radical shift in responses to the values between adolescence and adulthood. It may be that the values expressed in high school are significant in the behavior of adolescents at that time, but as the transition to adulthood takes place and some continue their education and others do not, the high school educational value orientation is no longer significant in the determination of (or reflection of) behavior.

The same line of argument may apply to the lack of a significant relationship between high school educational values and present occupational status. The fact that the student educational values are not associated with later educational and occupational achievements supports one of Coleman's notions. He pointed out that frequently the abler students sought the rewards of the adolescent subculture--popularity, activities, and athletics--and the students who valued grades in high school were not the students with the greatest ability.[27] If many of the most capable students (including mental ability) value popularity, activities, and athletics it is not too surprising that with their later socialization, academic development, and corresponding changing values they would attain at least an equivalent level of academic and occupational status as those who chose scholarship in high school.

The significant relationship between student educational values and social participation in high school further suggests that the values have behavioral implications only within the high school setting. On the other hand, social participation is associated with later educational and occupational achievements. Further analysis indicates that, indeed, the students who were above the social participation median had a median I.Q. score (Otis) of 116 whereas those who were below the participation median had a median I.Q. of 107 (The Henmon-Nelson scores were 121 and 111 respectively). Furthermore, there was a significant positive relationship between percentile rank in the high school graduating class and social participation (x^2=20.26, $p<.001$). The Coleman thesis is, therefore, rather conclusively supported that the students with the highest abilities are associated with high social participation and, in turn, educational and occupational achievements. The next question is, "Is social participation important in later educational and occupational status, or is intelligence the independent variable with social participation an intervening variable?" TABLE 32 depicts these variables with I.Q. controlled. The cell frequencies are small but suggestive.

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[27] James S. Coleman, "The Adolescent Subculture and Academic Achievement." American Journal of Sociology, 65 (January, 1960) pp. 340-341.

TABLE 32

Social Participation and Educational Achievements with I. Q. Held Constant (In Percentages)

High School Social Participation	Intelligence Quotients Below 100 Educational Achievement		
	None Beyond High School	Some College	At Least A Bachelor's Degree
Below Median (N=83)	70	30	0
Above Median (N=87)	36	46	18

	Intelligence Quotients 100-110 Educational Achievement		
	None Beyond High School	Some College	At Least A Bachelor's Degree
Below Median (N=83)	28	61	11
Above Median (N=87)	14	43	43

	Intelligence Quotients 111 and above Educational Achievement		
	None Beyond High School	Some College	At Least A Bachelor's Degree
Below Median (N=83)	15	44	41
Above Median (N=87)	3	32	65

There is an interaction between both social participation and I.Q. variables and later educational achievements. With increased I.Q. we find a higher percentage of students who have gone to college with some completing bachelor's degrees. We find, however, that the same finding is true with the above median social participation in each I.Q. category.

(d) The analysis of possible background factors associated with the permanence of high school friendships.

The analysis of this item has been concerned with some of the background factors that might be associated with the permanence of the friendships since high school. These factors may, or may not, be important in the continuance of a specific friendship tie.

When considering the continuation of high school friendships it seems likely that the proportions might vary with marital status, sex, educational, occupational, or social status categories. Among the members of this graduating class these relationships do not seem to prevail. The two factors that do seem important are friendship solidarity (which, if the index is analyzed, implies little geographical mobility) and social participation in high school. Apparently sociability in high school is a characteristic that is associated with continuing the high school relationships.

These friendship relationships represent a connecting link between adolescence and adulthood. By analyzing this link it is possible that a greater understanding may be achieved of the transition processes. The surface findings of the present research examines several factors and the proportion of people who have maintained contact with high school friends. With this background understanding a greater depth analysis should be made of factors that seem to be related to the permanence of specific friendships.

(e) The comparison of the achievement orientation variable with social participation in high school activities, present participation in voluntary associations, educational values, and educational and occupational achievements.

The measurement of an achievement orientation utilized a single item index. The validity of this item to measure an achievement orientation might be questioned, however, the item is associated with actual educational and occupational success. Since the achievement orientation of the respondents prior to the present time is unknown it is difficult to determine the cause and effect relationship. Additional clarity on this score will be possible if research is continued on these individuals.

The achievement orientation is not associated with the present participation in voluntary associations nor educational values. Among the males, their present achievement orientation is moderately associated with their high school social participation and highly related to educational and occupational achievements. The significance of the achievement orientation becomes more apparent since it exists when I.Q. and SES are controlled. An achievement orientation may serve as an important psychological variable in the development of individual potentialities. Additional longitudinal research is necessary to provide a more complete picture of the relationship between achievement and an orientation toward achievement.

V. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

CONCLUSIONS

(a) The comparison of the high school students' educational values with the educational values of the same individuals five years after graduation.

Radical shifts have taken place in educational values. In high school the majority of the students emphasized popularity, athletics, and activities; since high school the same individuals tend to stress academic achievement (at least for their children, though it might be argued that adults themselves do not embrace academic pursuits any more than do most high school students).

(b) The comparison of the high school students' social participation in voluntary school activities and organizations with their social participation in voluntary organizations (associations) at the present time.

In general, those students who were most active in school organizations were more active in community voluntary associations. However, this was not a strong relationship. Other research studies would suggest that there should be a more positive relationship. This investigator suspects that there is a "life cycle" of social participation and with continuing research the findings will reveal that the most active high school participants are at present just beginning to enter voluntary associations. If this is correct, the differences will increase with the passage of time.

(c) The study of possible relationships between the high school students' educational values, social participation in school activities, and later educational and occupational status.

Students' educational values were found to be associated with school social participation. Student values were not associated with occupational status (for the males) nor educational achievement. Student social participation was significantly associated with both educational achievement and occupational status (which were also correlated).

Some question can be raised regarding the validity of the Coleman method of determining student educational values. However, if this technique is valid, the data suggest that the values may be associated with the behavior of students within the school system (as a determinant in the prestige structure) but lose their importance after high school. In the configuration of changes that occur in the transition from adolescence to adulthood the values held in high school seem to undergo rapid change.

There is evidence that the most able students, because of the student prestige structure desire popularity and participate in high school student activities and athletics. However, these same students excel in later educational and occupational endeavors.

(d) The analysis of possible background factors associated with the permanence of high school friendships.

The proportions of students who continue regular contact with their high school three best friends do not differ significantly when marital, sexual, educational, occupational or SES characteristics are analyzed. The social-psychological dimension of "faith in people" likewise shows no relationship with the proportion who continued to maintain contact with their friends. Friendship solidarity and social participation in high school are positively related to maintaining contact with high school friends.

(e) The comparison of the achievement orientation variable with social participation in high school activities, present participation in voluntary associations, educational values and educational and occupational achievements.

The achievement orientation represents a social-psychological variable that is positively associated with high school social participation, educational and occupational achievements. Since the achievement orientation data was not gathered when the cohort was in high school the cause and effect relationships are not clear. The achievement orientation was not associated with present participation in voluntary associations nor educational values.

IMPLICATIONS

The number of research studies and essays on adolescent behavior have greatly increased in the last 25 years. Perhaps this growing concern with youth is in part associated with the increasing proportion of the population in the younger age categories. The increased research is also attributable to the belief by many sociologists that there has developed a subculture centered on the adolescent age group.

Children and adolescents in all societies interact together for play or other activities. However, a number of social analysts have noted that in industrialized societies youth interact together in institutions somewhat separate from the rest of the society. Parsons has noted the emergence of patterns of behavior that are a combination of age grading and sex role elements that result in a "youth culture."[28] Davis, by focusing on parent-youth conflict, viewed modern civilization as the creator of a hiatus between the generations with youth reared in a different milieu from that of their parents.[29] Eisenstadt[30] examined childhood and youth groups

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[28]Talcott Parsons, "Age and Sex in the Social Structure of the United States," American Sociological Review, 7 (October, 1942), pp. 604-614.

[29]Kingsley Davis, "The Sociology of Parent-Youth Conflict," American Sociological Review, 5 (August, 1940), pp. 523-535.

[30]S.N. Eisenstadt, From Generation to Generation (Glencoe: The Free Press, 1956), pp. 43-46.

cross-culturally and concluded that only in universalistic-achievement societies do these groups become strongly identified. These youth groups develop, in part, as a reaction to the particularistic-ascriptive patterns of orientation in the family and manifestly or latently they promote the universalistic-ascriptive orientation which is necessary for adult roles. Paradoxically, these groups also develop as "an attempt to maintain a pattern of relations differing from that expected in the future."[31]

When viewing the youth subculture (of the adolescent society) two contrasting views are apparent. Coleman[32] has emphasized the autonomy and separateness of the adolescent society, whereas Elkin and Westley have noted the similarities between adolescent and adult behavior.[33] A third position, implicit in the Eisenstadt position and explicit in the position taken by this researcher, is that a more realistic approach is an eclectic position between these two extremes.[34]

The present research data has important implications when viewed within the framework of the youth subculture literature. Certainly the youth subculture which is centered within the high school is evident. There are student values and a prestige system that are somewhat apart from the adult society. The adolescent values of popularity, activities, and athletics do conflict with the formal academic objectives of the school. However, there are many variations within the adolescent subculture and many adult values are also being promoted.

An important focus of sociology is on the social order (and continuity) and social dynamics (discontinuity). The data from this research project concentrates on the juncture between two age groupings--adolescence and adulthood. The systemic linkage between the two systems are highlighted. The value changes, the patterns of social participation in adolescence and adulthood, the continuity of friendships, the early adult orientation toward achievement, educational and occupational status are compared. The transition that occurs within this cohort as it enters a new stage in the life cycle is evident. Changes occur, yet there is at the same time a continuity of behavior. With transitional analysis of this type a better understanding of the adolescent society, the adult society, and the systemic linkages can be achieved.

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[31] Ibid., p. 46.

[32] James S. Coleman, The Adolescent Society, op. cit., p. 3.

[33] Frederick Elkin and William A. Westley, "The Myth of Adolescent Culture," American Sociological Review, 20 (December, 1955), pp. 680-684.

[34] Eldon E. Snyder, "Socioeconomic Variations, Values, and Social Participation Among High School Students." op. cit., p. 174.

RECOMMENDATIONS

The present research data illustrates the high degree of variability present within the adolescent society. There is not the conformity that adults often attribute to adolescents. Schools and other youth institutions need to recognize and take into account this tendency toward variability, otherwise the adult expectations of adolescents will be based upon misinformation and distortion.

Furthermore, the adolescent values are often temporary. With the almost startling shifts in educational values in the five years since graduation, especially toward a more academic orientation, this presents a strong argument for the establishment of community continuing education facilities. It is probable that continuing education should be more than opportunities to develop avocational skills, rather more rigorous academic pursuits might be desirable.

Throughout this research study student social participation in high school activities has been moderately associated with participation in voluntary associations in adulthood as well as an orientation toward achievement. A relatively high positive relationship exists between social participation and educational and occupational achievements. These data suggest that participation in school activities serve the important socialization function of preparing students with the social skills necessary for later educational and occupational success. It may be that school social participation and future academic and occupational success are also functions of additional underlying social-psychological and social factors.

In view of the emphasis on college entrance requirements this investigator recommends that a measure of high school social participation be made an integral part of the prospective student's entrance profile. The same recommendation should be considered by prospective employers.

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